

[4910-13-U]

## DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39 [66 FR 21851 5/2/2001]

[Docket No. 2000-NM-147-AD; Amendment 39-12207; AD 2001-09-02]

RIN 2120-AA64

Airworthiness Directives; Boeing Model 777-200 Series Airplanes

AGENCY: Federal Aviation Administration, DOT.

ACTION: Final rule.

**SUMMARY:** This amendment adopts a new airworthiness directive (AD), applicable to certain Boeing Model 777-200 series airplanes, that requires replacement of certain existing bushings of the aft trunnion of the outer cylinder of the main landing gear (MLG) with new bushings, and replacement of grease in an undercut on the aft trunnion, if necessary. The actions specified by this AD are intended to prevent stress corrosion cracking and consequent fracture of the aft trunnion of the outer cylinder of the MLG, which could result in collapse of the MLG. This action is intended to address the identified unsafe condition.

**DATES:** Effective June 6, 2001.

The incorporation by reference of certain publications listed in the regulations is approved by the Director of the Federal Register as of June 6, 2001.

**ADDRESSES:** The service information referenced in this AD may be obtained from Boeing Commercial Airplane Group, P.O. Box 3707, Seattle, Washington 98124-2207. This information may be examined at the Federal Aviation Administration (FAA), Transport Airplane Directorate, Rules Docket, 1601 Lind Avenue, SW., Renton, Washington; or at the Office of the Federal Register, 800 North Capitol Street, NW., suite 700, Washington, DC.

**FOR FURTHER INFORMATION CONTACT:** Stan Wood, Aerospace Engineer, Airframe Branch, ANM-120S, FAA, Seattle Aircraft Certification Office, 1601 Lind Avenue, SW., Renton, Washington 98055-4056; telephone (425) 227-2772; fax (425) 227-1181.

**SUPPLEMENTARY INFORMATION:** A proposal to amend part 39 of the Federal Aviation Regulations (14 CFR part 39) to include an airworthiness directive (AD) that is applicable to certain Boeing Model 777-200 series airplanes was published in the **Federal Register** on December 29, 2000 (65 FR 82959). That action proposed to require replacement of certain existing bushings of the aft trunnion of the outer cylinder of the main landing gear (MLG) with new bushings, and replacement of grease in an undercut on the aft trunnion, if necessary.

### **Comments**

Interested persons have been afforded an opportunity to participate in the making of this amendment. Due consideration has been given to the comments received.

### **Request to Delete Airplane with Line Number (L/N) 1**

One commenter requests that the Boeing Model 777 series airplane having L/N 1 be removed from the applicability section of the proposed rule. The commenter states that the main landing gear on that airplane was reworked prior to airplane delivery, and the outer cylinders with the final configuration of the aft trunnion were installed. The commenter adds that this rework was done at the manufacturer per Boeing Production Revision Record 61571, part G95. Such rework meets the

intent of Boeing Service Bulletin 777-32-0003, dated October 9, 1997, which was specified in the applicability section of the proposed rule.

The FAA concurs with the commenter. The FAA has determined that this airplane was retained by the manufacturer until delivery to an operator at the end of the year 2000. The following changes have been made to the final rule: The applicability and cost impact sections have been revised accordingly; paragraph (a)(3) of the final rule has been revised to remove the reference to the airplane having L/N 1; and Note 3, which specified, "For the purposes of this AD, the airplane having L/N 1 is considered to have the configuration of a Group 1 airplane," has been removed.

#### **Revised Service Information**

The same commenter states that, subsequent to issuance of the proposed rule, Boeing Alert Service Bulletin 777-32A0025, Revision 1, dated March 8, 2001, was submitted to the FAA for approval. (The original issue of the service bulletin was referenced in the proposal as the appropriate source of service information for accomplishment of the specified actions.) The commenter adds that the revised bulletin contains additional inspection requirements for operators that used a specific corrosion-inhibiting compound when incorporating the referenced service bulletin. The commenter notes that when the final rule is released it should reference the revised service bulletin.

The FAA concurs with the commenter. Since the issuance of the proposed rule, the FAA has approved Revision 1 of the service bulletin. The service bulletin was revised in order to delete a certain corrosion-inhibiting compound specified in the original issue that, in certain conditions, has been found to promote corrosion. Documentation received from the manufacturer shows that compound was used on only 3 of the 25 airplanes affected by this final rule, and those airplanes are scheduled to be reworked using the revised service bulletin. The final rule has been revised to require accomplishment of the specified actions per Revision 1 only. A new Note 3 has been added to the final rule to give credit for airplanes that applied the correct corrosion-inhibiting compound per the original service bulletin.

#### **Conclusion**

After careful review of the available data, including the comments noted above, the FAA has determined that air safety and the public interest require the adoption of the rule with the changes previously described. The FAA has determined that these changes will neither increase the economic burden on any operator nor increase the scope of the AD.

#### **Cost Impact**

There are approximately 25 airplanes of the affected design in the worldwide fleet. The FAA estimates that 11 airplanes of U.S. registry will be affected by this AD, that it will take approximately 36 work hours per airplane to accomplish the required actions, and that the average labor rate is \$60 per work hour. Required parts will cost approximately \$13,228 per airplane. Based on these figures, the cost impact of the AD on U.S. operators is estimated to be \$169,268, or \$15,388 per airplane.

The cost impact figure discussed above is based on assumptions that no operator has yet accomplished any of the requirements of this AD action, and that no operator would accomplish those actions in the future if this AD were not adopted. The cost impact figures discussed in AD rulemaking actions represent only the time necessary to perform the specific actions actually required by the AD. These figures typically do not include incidental costs, such as the time required to gain access and close up, planning time, or time necessitated by other administrative actions.

#### **Regulatory Impact**

The regulations adopted herein will not have a substantial direct effect on the States, on the relationship between the national Government and the States, or on the distribution of power and responsibilities among the various levels of government. Therefore, it is determined that this final rule does not have federalism implications under Executive Order 13132.

For the reasons discussed above, I certify that this action (1) is not a "significant regulatory action" under Executive Order 12866; (2) is not a "significant rule" under DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979); and (3) will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act. A final evaluation has been prepared for this action and it is contained in

the Rules Docket. A copy of it may be obtained from the Rules Docket at the location provided under the caption "ADDRESSES."

**List of Subjects in 14 CFR Part 39**

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

**Adoption of the Amendment**

Accordingly, pursuant to the authority delegated to me by the Administrator, the Federal Aviation Administration amends part 39 of the Federal Aviation Regulations (14 CFR part 39) as follows:

**PART 39 - AIRWORTHINESS DIRECTIVES**

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

§ 39.13 [Amended]

2. Section 39.13 is amended by adding the following new airworthiness directive:

# AIRWORTHINESS DIRECTIVE



Aircraft Certification Service  
Washington, DC

U.S. Department  
of Transportation  
**Federal Aviation  
Administration**

*We post ADs on the internet at "av-info.faa.gov"*

The following Airworthiness Directive issued by the Federal Aviation Administration in accordance with the provisions of Title 14 of the Code of Federal Regulations (14 CFR) part 39, applies to an aircraft model of which our records indicate you may be the registered owner. Airworthiness Directives affect aviation safety and are regulations which require immediate attention. You are cautioned that no person may operate an aircraft to which an Airworthiness Directive applies, except in accordance with the requirements of the Airworthiness Directive (reference 14 CFR part 39, subpart 39.3).

## **2001-09-02 BOEING: Amendment 39-12207. Docket 2000-NM-147-AD.**

**Applicability:** Model 777-200 series airplanes; line numbers (L/N) 2 through 29 inclusive, except L/N's 10, 14, and 18; certificated in any category; except those on which the outer cylinder of the main landing gear (MLG) has been replaced in accordance with Boeing Service Bulletin 777-32-0003, dated October 9, 1997.

**Note 1:** This AD applies to each airplane identified in the preceding applicability provision, regardless of whether it has been modified, altered, or repaired in the area subject to the requirements of this AD. For airplanes that have been modified, altered, or repaired so that the performance of the requirements of this AD is affected, the owner/operator must request approval for an alternative method of compliance in accordance with paragraph (c) of this AD. The request should include an assessment of the effect of the modification, alteration, or repair on the unsafe condition addressed by this AD; and, if the unsafe condition has not been eliminated, the request should include specific proposed actions to address it.

**Compliance:** Required as indicated, unless accomplished previously.

To prevent stress corrosion cracking and consequent fracture of the aft trunnion of the outer cylinder of the MLG, which could result in collapse of the MLG, accomplish the following:

### **Replacement of Bushings**

(a) Within 5 years and 300 days since date of manufacture of the airplane, or within 1 year after the effective date of this AD, whichever occurs later, replace bushings in the aft trunnion of the outer cylinder with new bushings by doing paragraphs (a)(1), (a)(2), (a)(3), and (a)(4) of this AD; as applicable; in accordance with Boeing Alert Service Bulletin 777-32A0025, Revision 1, dated March 8, 2001.

- (1) Remove bushings in the aft trunnion of the outer cylinder of the MLG.
- (2) Perform a one-time detailed visual inspection of the aft trunnion area for corrosion or other damage.
- (3) For airplanes listed in Group 1 of the service bulletin: Replace grease in the undercut of the aft trunnion with corrosion-inhibiting compound.
- (4) Install new bushings with corrosion-inhibiting compound.

**Note 2:** For the purposes of this AD, a detailed visual inspection is defined as: "An intensive visual examination of a specific structural area, system, installation, or assembly to detect damage, failure, or irregularity. Available lighting is normally supplemented with a direct source of good lighting at intensity deemed appropriate by the inspector. Inspection aids such as mirror, magnifying lenses, etc., may be used. Surface cleaning and elaborate access procedures may be required."

## **Corrective Action**

(b) If any corrosion or other damage is found during the inspection required by paragraph (a)(2) of this AD: Prior to further flight, repair in accordance with Boeing Alert Service Bulletin 777-32A0025, Revision 1, dated March 8, 2001; except, where the service bulletin specifies to contact Boeing for instructions, prior to further flight, repair in accordance with a method approved by the Manager, Seattle Aircraft Certification Office (ACO), FAA; or in accordance with data meeting the type certification basis of the airplane approved by a Boeing Company Designated Engineering Representative (DER) who has been authorized by the Manager, Seattle ACO, to make such findings. For a repair method to be approved by the Manager, Seattle ACO, as required by this paragraph, the approval letter must specifically reference this AD.

Note 3: Prior accomplishment of paragraphs (a) and (b) of this AD, as specified in Boeing Alert Service Bulletin 777-32A0025, dated April 6, 2000; using BMS 3-27 or Cor-Ban 27L corrosion-inhibiting compound; is acceptable for compliance with the applicable actions required by this AD.

## **Alternative Methods of Compliance**

(c) An alternative method of compliance or adjustment of the compliance time that provides an acceptable level of safety may be used if approved by the Manager, Seattle ACO. Operators shall submit their requests through an appropriate FAA Principal Maintenance Inspector, who may add comments and then send it to the Manager, Seattle ACO.

Note 4: Information concerning the existence of approved alternative methods of compliance with this AD, if any, may be obtained from the Seattle ACO.

## **Special Flight Permits**

(d) Special flight permits may be issued in accordance with sections 21.197 and 21.199 of the Federal Aviation Regulations (14 CFR 21.197 and 21.199) to operate the airplane to a location where the requirements of this AD can be accomplished.

## **Incorporation by Reference**

(e) Except as provided by paragraph (b) of this AD: The actions shall be done in accordance with Boeing Alert Service Bulletin 777-32A0025, Revision 1, dated March 8, 2001. This incorporation by reference was approved by the Director of the Federal Register in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. Copies may be obtained from Boeing Commercial Airplane Group, P.O. Box 3707, Seattle, Washington 98124-2207. Copies may be inspected at the FAA, Transport Airplane Directorate, 1601 Lind Avenue, SW., Renton, Washington; or at the Office of the Federal Register, 800 North Capitol Street, NW., suite 700, Washington, DC.

## **Effective Date**

(f) This amendment becomes effective on June 6, 2001.

FOR FURTHER INFORMATION CONTACT: Stan Wood, Aerospace Engineer, Airframe Branch, ANM-120S, FAA, Seattle Aircraft Certification Office, 1601 Lind Avenue, SW., Renton, Washington 98055-4056; telephone (425) 227-2772; fax (425) 227-1181.

Issued in Renton, Washington, on April 20, 2001.

Donald L. Riggin, Acting Manager, Transport Airplane Directorate, Aircraft Certification Service.